

## TECHNICAL DATA

### MG 9R-1\*MG 9R-2



Rua: Salvador Roberto, nº1963 - Centro  
Cep: 39260 - 000 - Várzea da Palma - Minas Gerais - MG  
Tel: 55 38 3731- 1451 - Fax: 55 38 3731-1511  
E-mail:trading@trablin.com.br

### *For Ductile Iron Nodulizing*

	MG 9R-1	MG 9R-2
<b>Chemical Analysis:</b>		
Silicon	43 - 48%	43 - 48%
Magnesium	8 - 10 %	8 - 10 %
Calcium	1.5 - 2.0 %	1.5 - 2.0 %
Aluminium	1.2% max	1.2% max
Cerium	0.25 – 0.40%	0.40 – 0.55%
Rare Earths (total)	0.50 – 0.80%	0.80 – 1.10%
<b>Sizing Mesh Tyler:</b>	Down x 9M 9M x ¼” 9M x 1 ¼”	Other sizes may be inquired

MG 9R 1-2 alloys permit to reduce the normal quantities additions, and thus result in lower Silicon input during the nodulizing treatment. The alloys are particularly used in foundries that are having troubles utilizing high content all of their returns, or where base Sulphur levels are on the high side. (Cubilot case)

Rare Earths elements to MG 9R 1-2 neutralize the effects of elements deleterious to spheroid graphite formation, when provide nucleation to reduce cast carbides, and enhance Magnesium recovery. Calcium is a graphitizing element. It helps in the inoculation effects, besides contributing to reactivity Mg control during nodulization process. The choice of Rare Earth levels gives foundries flexibility in determining which Rare Earth content best fits their individual needs.

Nowadays, concern regarding contamination for undesirable elements are increasing, our alloy Mg 9R 1 – 2 are ingoted in thin layers in ingot molds covered to avoid Mg segregation problem during alloy solidification. This technology assures the reduction of fines generation, during crushing and screening operations.

MG 9R 1-2 are produced in submerged arc furnaces, where charcoal and iron ore are used respectively, as reductor agent and source of Fe elements. Therefore, the residual levels of undesirable elements are very low. For example, the typical Chromium level is 0.05%, with typical Manganese level of 0.025%. Alloys prepared with the utilization of steel scraps, could have higher level of those elements.